# UNIT: MATTER AND TYPES OF MIXTURES

1. Complete the following sentences related to matter and its changes.

| Cannot | solutions | pure | homogeneous | atoms | heterogeneous |
|---|---|---|---|---|---|

- Matter is made up of one or more substances which, in turn, consist of tiny particles, called
- Pure substances contain only one type of component which be separated into other substances. For example, water, oxygen, salt, diamonds...
- Mixtures contain two or more substances. For example, sea water is made up of water and salts, and rocks are made up of two or more minerals.
- mixtures: the different components can be distinguished.
- mixtures or : the different components cannot be distinguished.

2. Identify the methods of separation in these pictures.






Magnetic Filtration Evaporation Decantation

LIVEWORKSHEETS

3. How do we separate mixtures? Experiment

You need: a plastic bottle, a coffee filter, a glass bowl, a piece of nylon, a magnet, tape, a punch, scissors, nails, salt, oil, sand, water.

1. Cut off the bottom part of a plastic bottle.
2. Using the punch, make a hole in the centre of the cap.
3. Turn the bottle upside down. Put the coffee filter into the bottle.
4. Cover the open part of the bottle with nylon and seal it with the tape.
5. Add the ingredients (nails. salt, oil, sand, water) together and mix them in the bowl.
6. What method would you use to separate the **nails**?
7. Place the bottle over the tray. Pour the mixture into the bottle.
8. What happens to the **sand**? What method are we using?
9. What happens to the **oil**? What method are we using?
10. If you leave the remaining mixture in the sun. What would it happen? What method is it?

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